

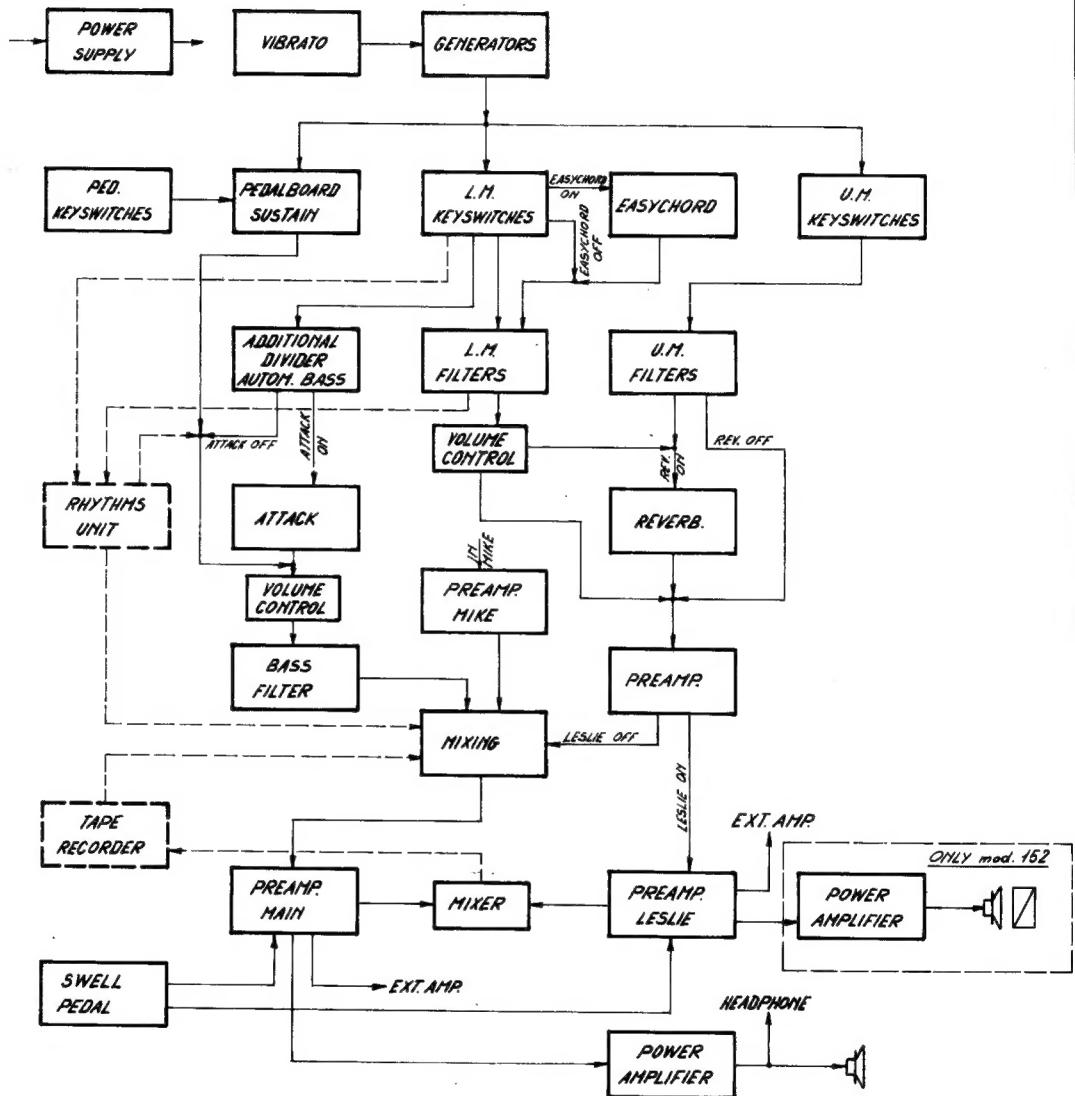
FARFISA

ELECTRONIC ORGANS

MOD 151~152

SCHEMATIC DIAGRAMS

BLOCK DIAGRAM

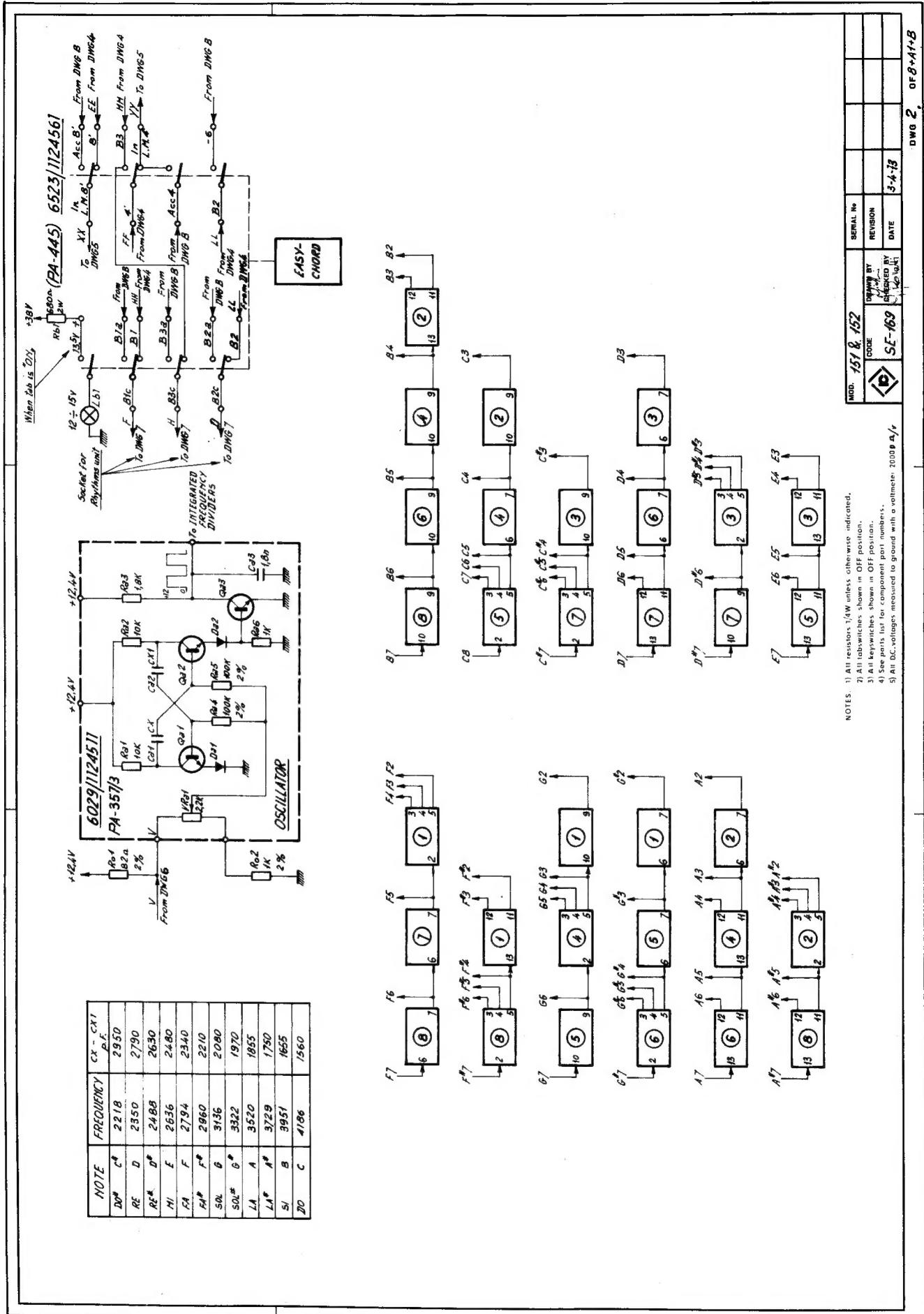


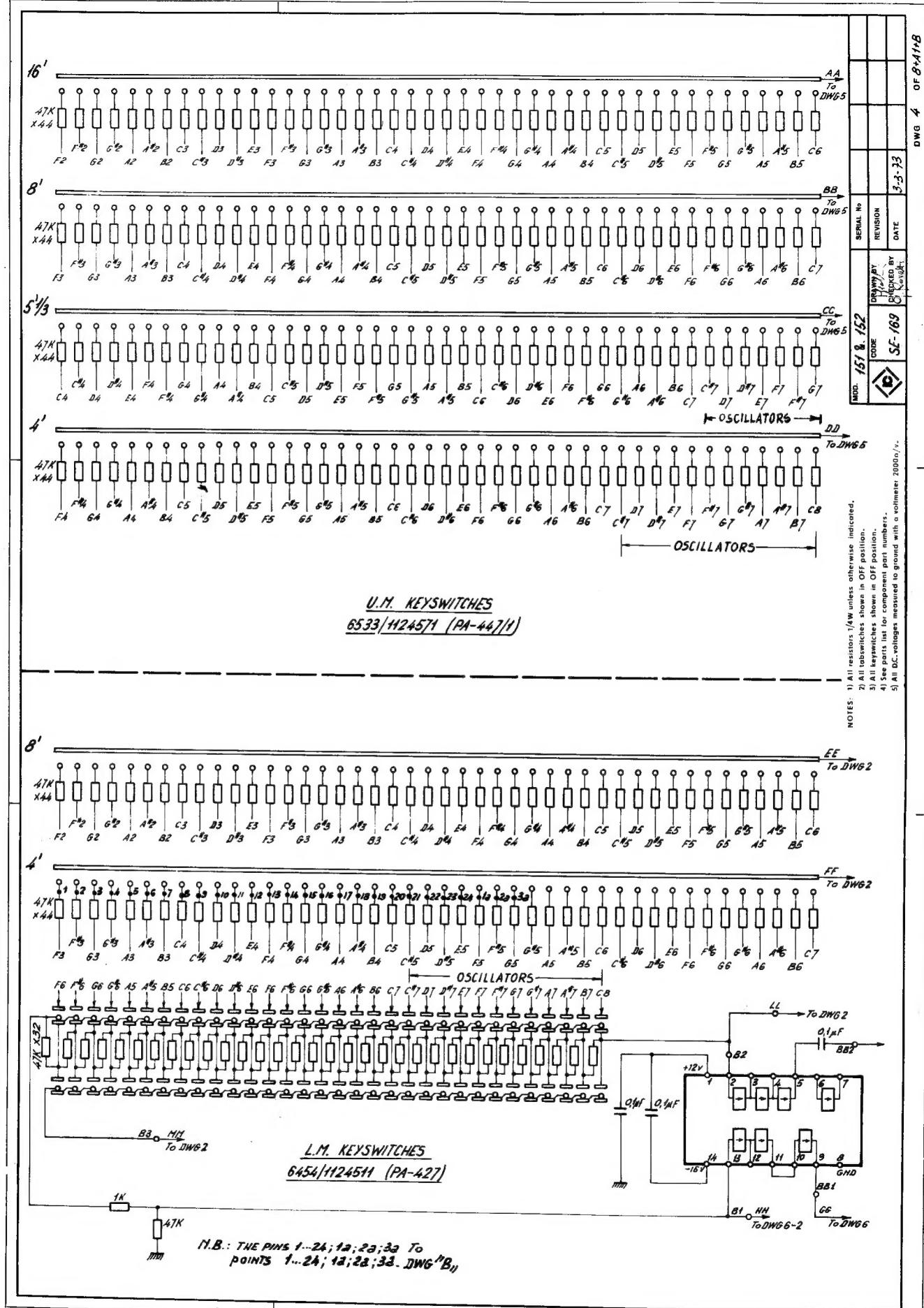
NOTES:

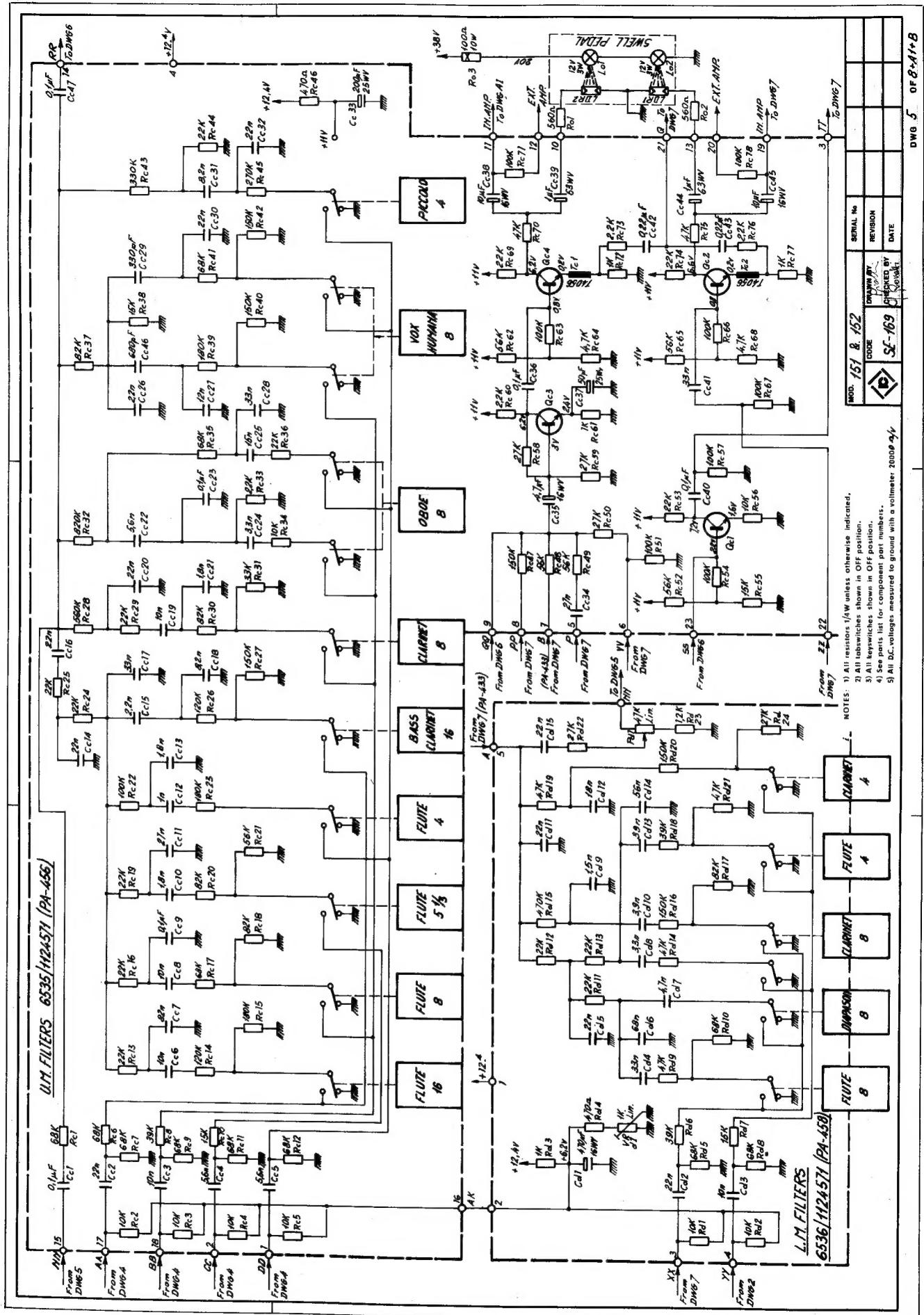
- 1) All resistors 1.4W unless otherwise indicated.
- 2) All switches shown in OFF position.
- 3) All keyswitches shown in OFF position.
- 4) See parts list for component part numbers.

| | | | |
|---|----------------|--|------------------|
| MOD. 151 & 152 | CODE SE-169 | SERIAL NO. | REVISION DATE |
|  | | DRAWN BY H. J. HARRIS CHANGED BY S. L. COOPER | |

XIV. AT S.P.A. 1173





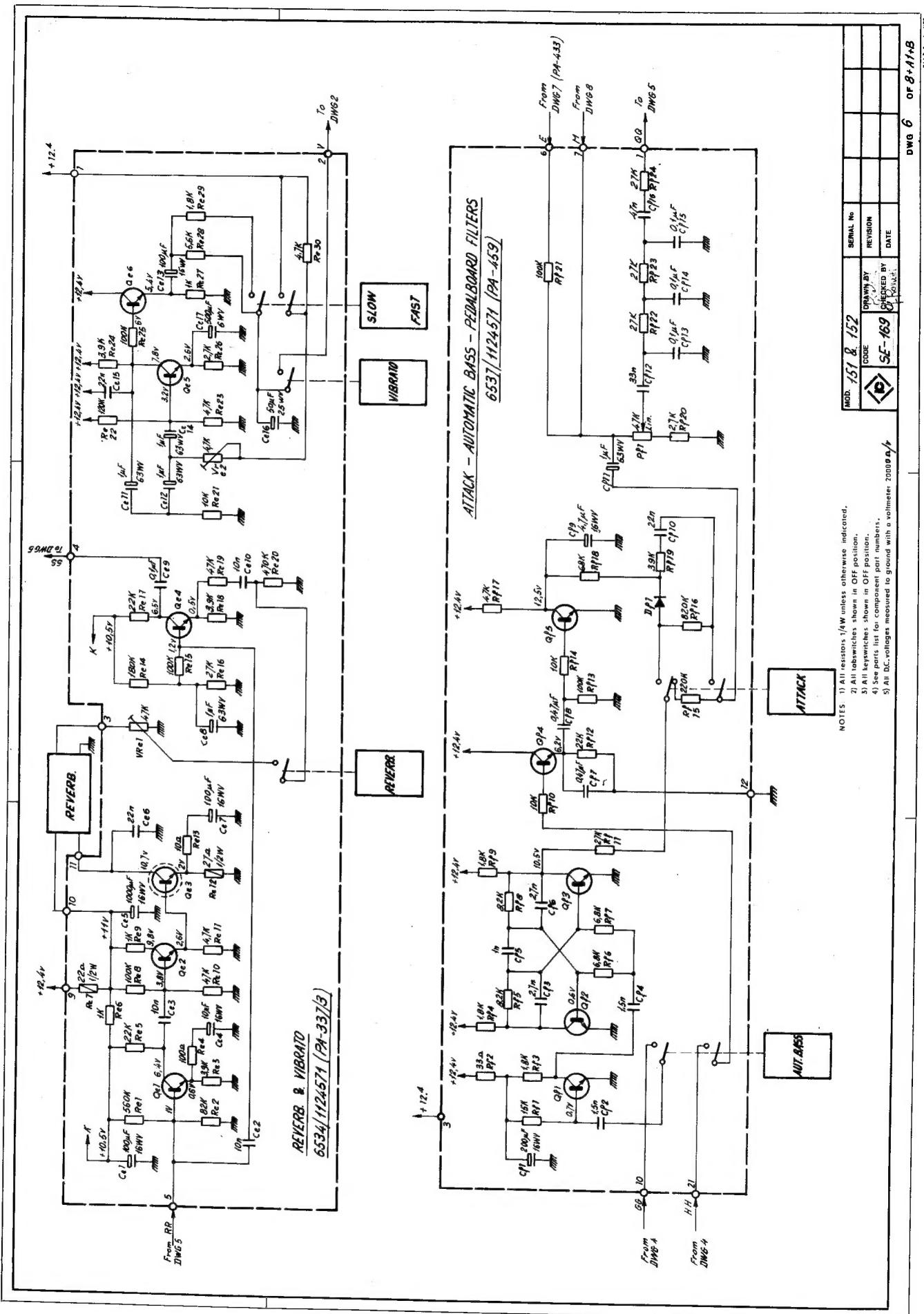


NOTES: 1) All resistors 1/W unless otherwise indicated.
 2) All transistors shown in Off position.
 3) All keyswitches shown in Off position.
 4) See parts list for component part numbers.
 5) All DC voltages measured to ground with a voltmeter 20000 ohms.

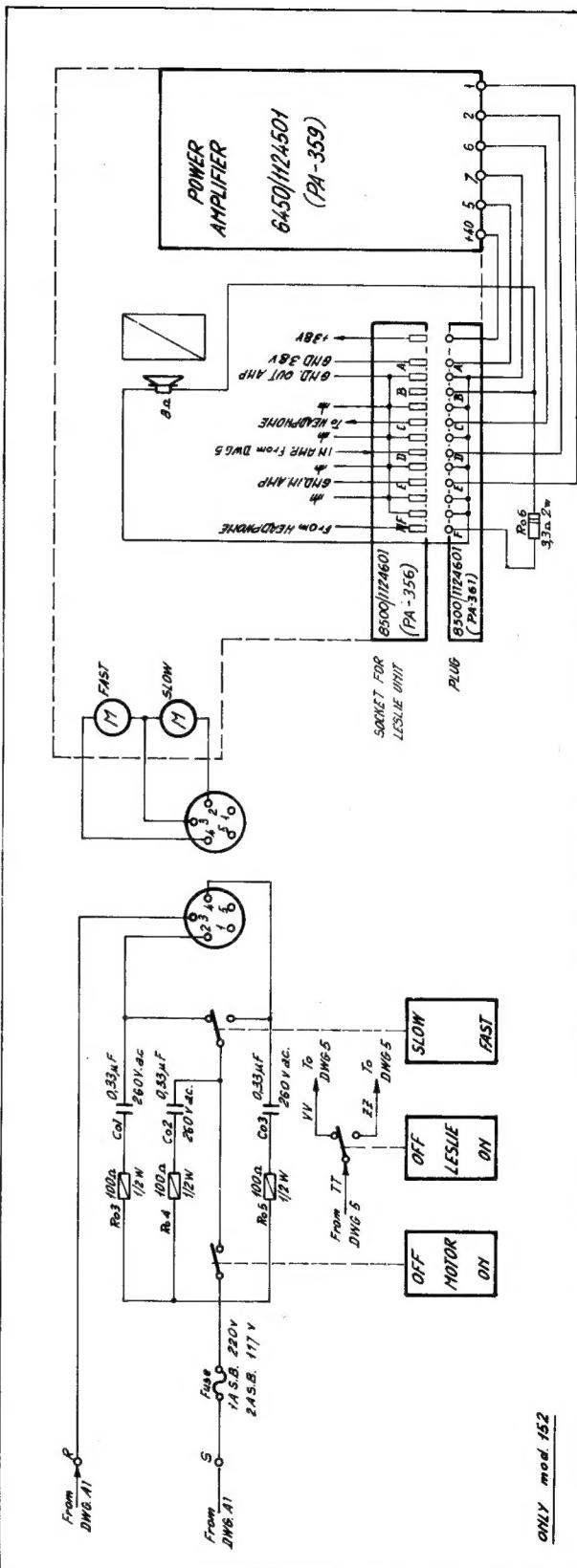
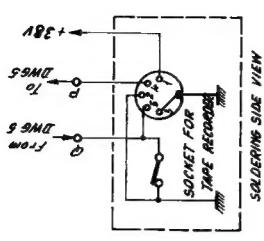
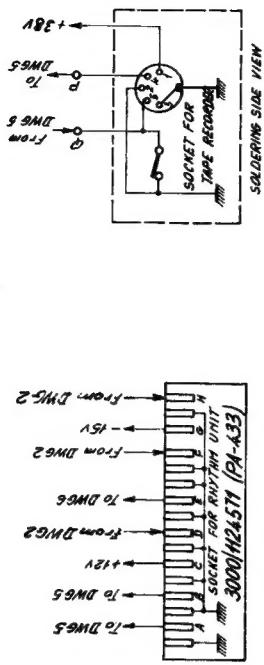
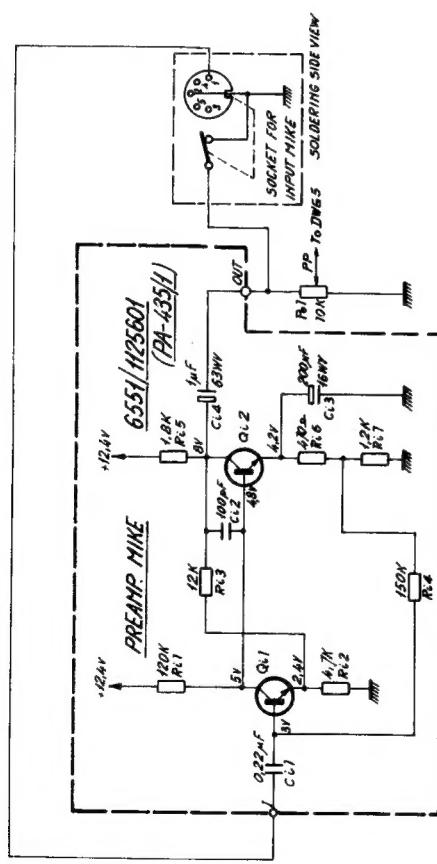
Doc. 151 & 152
 Doc. 169
 Drawn by
 Checked by
 Date

DWB 5 of 8-A-14-B

11/11/64 A-14-B



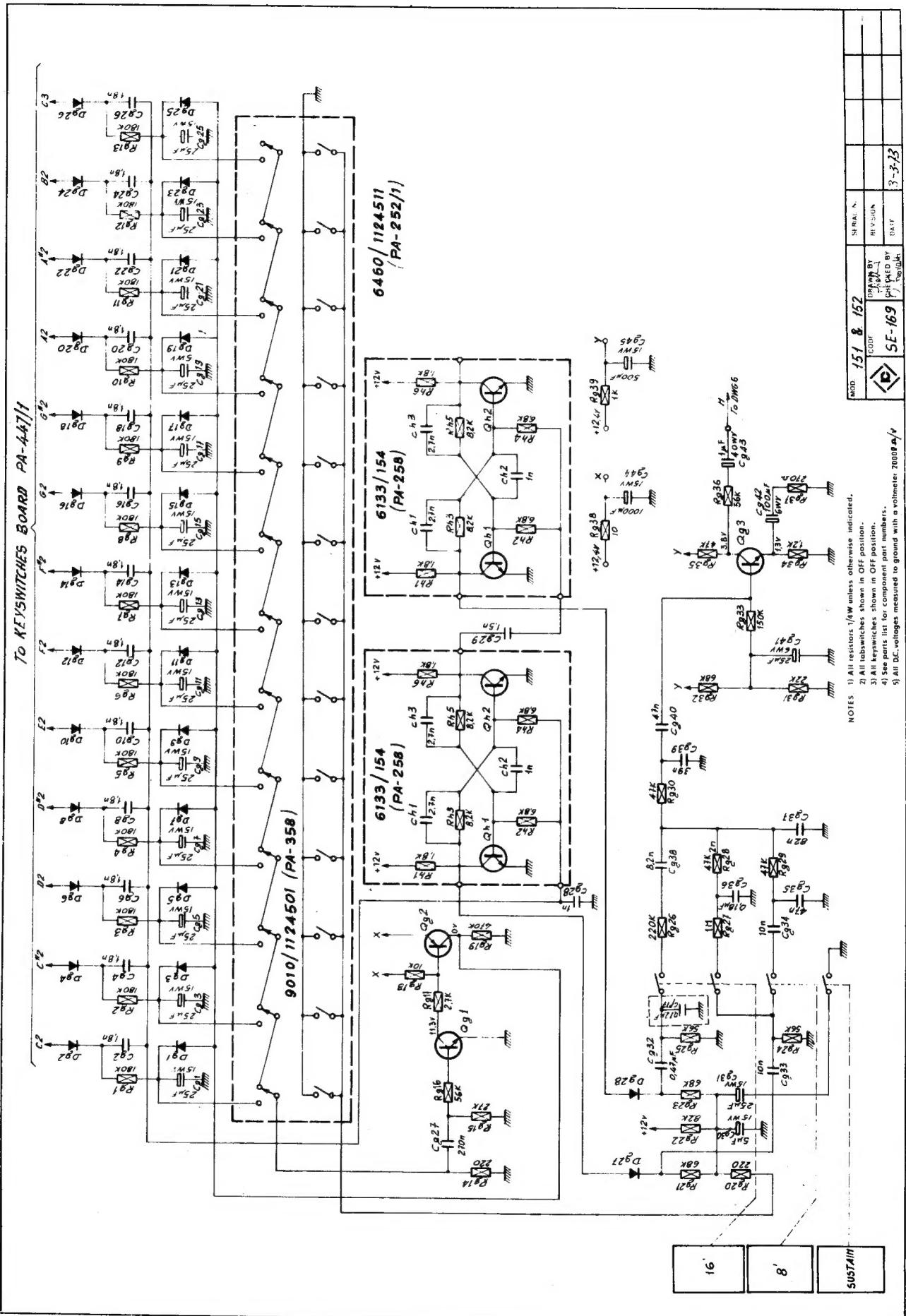
1/2. The points B-2 are directly connected
on models 151-152/Without PARTNER 15)

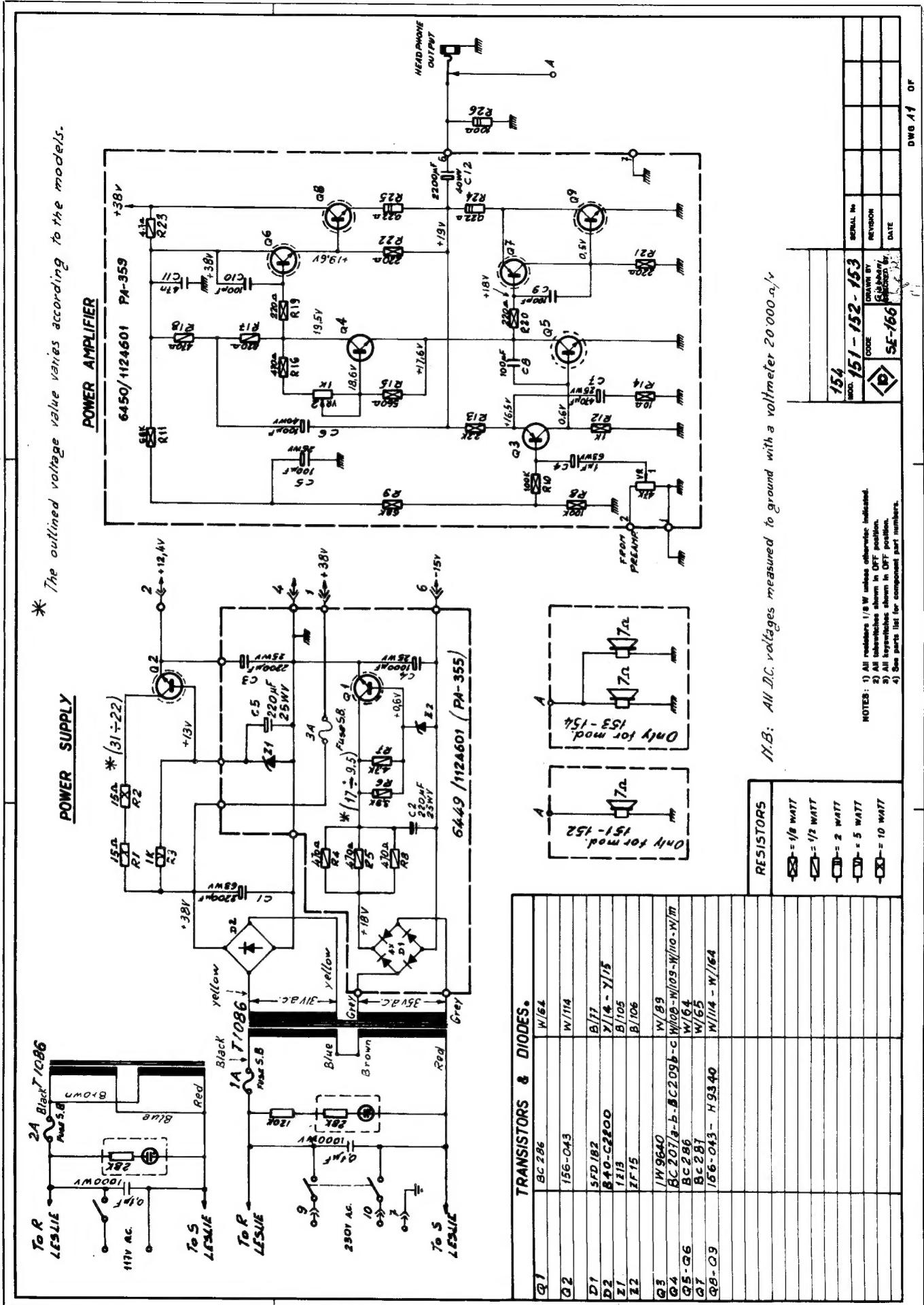


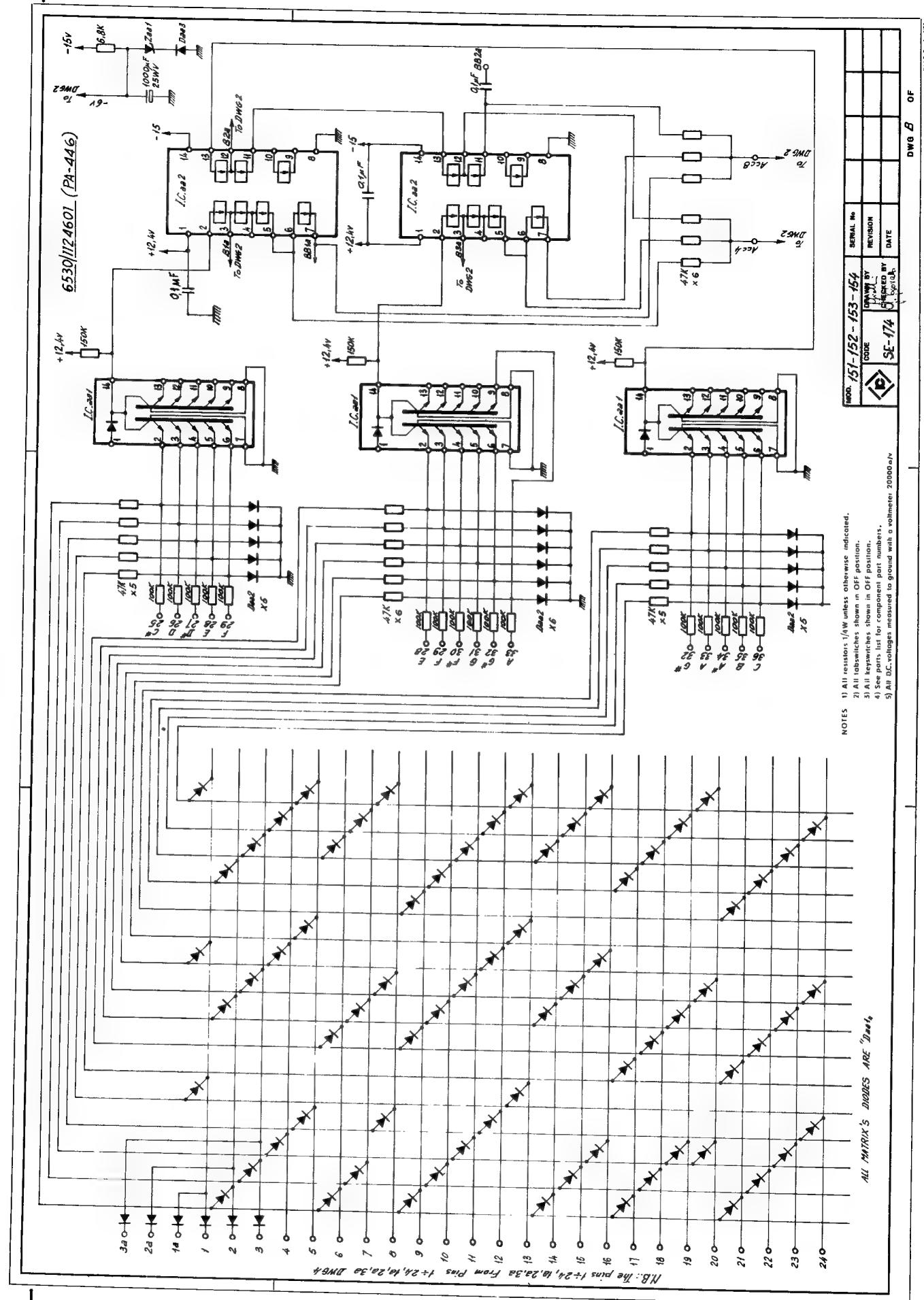
ONLY mod. 152

NOTES 1) All resistors 1/2W unless otherwise indicated.
2) All keyswitches shown in Off position.
3) All keyswitches shown in Off position.
4) See parts list for component part numbers.
5) All DC voltages measured to ground with a voltmeter 2000Ω/V.

| NO. 151-152 | CODE | DRAWN BY | REVISION | DATE | 3-3-73 |
|-------------|--------|----------|----------|------|-----------------|
| | SE-168 | CONRAD | | | DWG 7 OF & A1+B |







NOTES

- 1) All resistors 1/4W unless otherwise indicated.
- 2) All latches shown in OFF position.
- 3) All keyswitches shown in OFF position.

ALL MATRIX'S DIODES ARE "P-ON-S."

Models 151 & 152

TRANSISTORS (Q) & DIODES (D) LIST

(1)

| Schem. Ref. | Circuit | Type | Part Code |
|----------------|--|---|---|
| <u>CHASSIS</u> | <u>POWER SUPPLY CHASSIS (DWG A1/SE 166)</u> | | <u>8000/1124601</u> |
| Q 2 | Series Stabilizer..... | Westinghouse 156 - 043 Solitron H 9340..... | W/1800 W/1800 |
| D 2 | Rectifier Bridge..... | ITT STANDARD B 40-C 2200 SIEMENSE B 40-C 2200 AEG B 40-C 2200 | Y/14 - Y/15 Y/14 - Y/15 Y/14 - Y/15 |
| <u>PA 355</u> | <u>VOLTAGE REGULATOR BOARD (DWG A1/SE 166)</u> | | <u>6449/1124501</u> |
| Q 1 | Series Stabilizer..... | SGS BC 286..... | W/1601 |
| D 1 | Rectifier Diode (Bridge)..... | MISTRAL SFD 182..... TEXAS 1N 914..... | B/77 B/108 |
| Z 1 | Voltage Reference-Diode Zener.. (13V-1W) | IRCI 1 Z 13..... MOTOROLA 1N4743..... | B/105 B/105 |
| Z 2 | Voltage Reference-Diode Zener.. (15V-400mV) | ITT STANDARD ZF 15.... MOTOROLA 1N5245-B..... | B/106 |
| <u>PA 359</u> | <u>POWER AMPLIFIER BOARD (DWG A1/SE 166)</u> | | <u>6450/1124601</u> |
| Q 3 | Input Preamplifier PNP..... | SGS 1W 9640..... | W/89 - W/1500 |
| Q 4 | Temperature Compensator..... | MISTRAL BC 207 A or B. BC 209 B or C. | W/1401 W/1407 - W/1410 |
| Q 5 | Driver Amplifier NPN..... | SGS BC 286..... | W/1601 |
| Q 6 | Driver NPN..... | SGS BC 286..... | W/1601 |
| Q 7 | Driver PNP..... | SGS BC 287..... | W/1702 |
| Q 8 - Q 9 | Power Transistors..... | WESTINGHOUSE 156-043.. SOLITRON H 9340..... | W/1800 W/1800 |

Models 151 & 152

TRANSISTORS (Q) & DIODES (D) LIST

(2)

| Schem. Ref. | Circuit | Type | Part Code |
|-------------|---|------------------------|---------------------|
| PA 357 - 3 | <u>OSCILLATOR (DWG 2/ SE 169)</u> | | <u>6029/1124511</u> |
| Q a 1 | MVBTR. Master Oscillator..... | BC 108 A,B or C..... | W/1406 |
| Q a 2 | MVBTR. Master Oscillator..... | BC 109 - B or C..... | W/1409 - W/1412 |
| Q a 3 | Buffer Amplifier..... | BC 208 A,B or C..... | W/1404 |
| | | BC 209 - B or C..... | W/1407 - W/1410 |
| | | 2N5172..... | W/1425 |
| D a 1 | | | |
| D a 2 | Base Breakdown Protection..... | SGS 1X9809..... | B/34 |
| PA 447 - 1 | <u>KEYSWITCH BOARD U.M. (DWG 4/ SE 169)</u> | | <u>6533/1124571</u> |
| I.C. 1 - 8 | Integrated Frequency Divider.. | GIE..... | W/1100 - W/1101 |
| PA 427 | <u>KEYSWITCH BOARD L.M. (DWG 4/ SE 169)</u> | | <u>6454/1124511</u> |
| I.C. 1 | Integrated Frequency Divider.. | GIE..... | W/1100 - W/1101 |
| PA 456 | <u>UPPER MANUAL FILTERS BOARD (DWG 5/ SE 169)</u> | | <u>6535/1124571</u> |
| Q c 1 | Lesliechannel Preamplifier.... | | |
| Q c 2 | Lesliechannel Final Preamplifier | BC 209 - B red dot.... | |
| Q c 3 | Mainchannel Preamplifier..... | BC 239 - B red dot.... | W/1413 |
| Q c 4 | Mainchannel Final Preamplifier | | |
| PA 337 - 3 | <u>REVERB. VIBRATO BOARD (DWG 6/ SE 169)</u> | | <u>6534/1124571</u> |
| Q e1-Q e2 | Reverberation Preamplifier.... | BC 109 B or C..... | W/1409 - W/1407 |
| | | BC 209 B or C..... | |
| Q e 3 | Reverberation Driver..... | SGS BC 286..... | W/1601 |
| Q e 4 | Reverberation Preamplifier.... | BC 109 B or C, red dot | W/1415 - W/1413 |
| | | BC 209 B or C, red dot | |
| Q e 5 | Vibrato Oscillator..... | BC 109 B or C..... | W/1409 - W/1407 |
| Q e 6 | Vibrato Buffer..... | BC 209 B or C..... | |

Models 151 & 152

TRANSISTORS (Q) & DIODES (D) LIST

(3)

| Schem. Ref. | Circuit | Type | Part Code |
|-------------------|---|-------------------------|---------------------|
| <u>PA 459</u> | <u>AUTOMATIC BASS - ATTACK BOARD (DWG 6/SE 169)</u> | | <u>6537/1124571</u> |
| Q f 1 | Automatic Bass Driver..... | G.E. 2N 5172..... | W/1425 |
| Q f 2-Q f 3 | Automatic Bass Frequency Divid | BC 109 B or C..... | W/1412 - W/1409 |
| | | BC 209 B or C..... | W/1407 - W/1410 |
| Q f 4 | Attack Control..... | BC 109 B or C..... | W/1412 - W/1409 |
| | | BC 209 B or C..... | W/1407 - W/1410 |
| Q f 5 | Attack Control..... | G.E. 2N 5172..... | W/1425 |
| | | BC 109 B or C..... | W/1412 - W/1409 |
| | | BC 209 B or C..... | W/1407 - W/1410 |
| D f 1 | Attack Gate..... | SGS 1X9809..... | B/34 |
| | | TEXAS D 525 A or B.... | B/110 - B/111 |
| <u>PA 435 - 1</u> | <u>PREAMPLIFIER MIKE (DWG 7/ SE 169)</u> | | <u>6551/1125601</u> |
| Q i 1-Q i 2 | Preamplifier Transistors..... | BC 209 B or C..... | W/1413 |
| | | BC 239 B or C..... | |
| | | BC 109 B or C..... | W/1416 - W/1415 |
| | | BC 149 B..... | W/1418 - W/1414 |
| <u>PA 252 - 1</u> | <u>SUSTAIN - PEDALBOARD (DWG 8/ SE 169)</u> | | <u>6460/1124511</u> |
| Q g 1 | Pulse Amplifier..... | G.E. 2N 5172..... | W/1425 |
| | | BC 109 B or C..... | W/1412 - W/1409 |
| | | BC 209 B or C..... | W/1407 - W/1410 |
| Q g 2 | Reset..... | BFW 87 (Mullard)..... | W/153 |
| Q g 3 | Audio Preamplifier..... | BC 109 B or C red dot.. | W/1415 - W/1418 |
| | | BC 209 B or C red dot.. | W/1413 - W/1416 |
| D g1-D g26 | Memory gate and Reset..... | SGS 1X9809..... | B/34 |
| Dg27-D g28 | Sustain gate..... | TEXAS D 252 A or B.... | B/110 - B/111 |

Models 151 & 152

TRANSISTORS (Q) & DIODES (D) LIST

4

| Schem. Ref. | Circuit | Type | Part Code |
|---------------|--|---|-----------------------|
| <u>PA 258</u> | <u>DIVIDER MODULE (DWG 8/ SE 169)</u> | | <u>6133/154</u> |
| Q h 1 | | | |
| Q h 2 | Frequency Divider..... | G.E. 2N 5172..... | W/1425 |
| <u>PA 446</u> | <u>EASYCHORD MEROY (DWG B/ SE 174)</u> | | <u>6530/1124601</u> |
| I.C. aa 1 | Gate with 10 Emitter..... | GIE - MISTRAL..... | W/1100 - W/1101 |
| I.C. aa 2 | Divider Frequency..... | ITT - STANDARD TBA 470 | W/1202 |
| Z aa 1 | Voltage Reference-Diode Zener (5,6-400mA) | ITT - STANDARD ZPD 5,6 MULLARD BZX79 C5V6.... IRCI - 1N 752A..... MOTOROLA - 1N 5232B... | B/69 |
| D aa 1 | Matrix Diodes..... | | |
| D aa 2 | Diodes..... | | |
| D aa 3 | Threshold Diode..... | | |
| | | { SGS - IX9809..... TEXAS - D 525 A or B.. | B/34 B/110 - B/111 |